LANDAU ASSOCIATES, INC.
Geoenvironmental Engineering and Technologies

February 9, 1990

Mr. Neil Thompson
U.S. Environmental Protection Agency
Park Place Building
1200 Sixth Avenue
Seattle, WA 98101

RE: **PROGRESS REPORT**
COLBERT LANDFILL AREA
JANUARY 1990

Presented herein is the January 1990 progress report for the Colbert Landfill RD/RA Superfund Project (Project), which was prepared by Landau Associates, Inc. (Landau), Spokane County's (County) engineering consultant. It addresses the reporting requirements specified in Section XI of the Project Consent Decree, including:

- A description of Remedial Action activities commenced or completed during the reporting period,
- Remedial Action activities projected to be commenced or completed during the next reporting period (through February 1990) and
- Any problems that have been encountered or are anticipated in commencing or completing the activities.

1.0 ACTIVITIES COMMENCED/COMPLETED DURING REPORTING PERIOD

Several activities were commenced and/or completed during the reporting period. Most of these activities are related to continuation of Phase I field activities. Specific activities commenced and/or completed during this period include:

- Well construction activities have been commenced, completed, and are ongoing at a number of Phase I monitoring well locations (refer to attached Site Plan, Figure 1):
  - The second monitoring well at Location CD-20 was completed. The well is screened in the Basalt Aquifer from about 158 to 163 feet below ground surface (BGS).
  - The second monitoring well at Location CD-21 was completed. The well is screened in the Lower Sand/Gravel Aquifer from about 215 to 235 feet BGS.

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- The first (and only) monitoring well at Location CD-22 was completed. The well is screened in the Latah Formation from about 130 to 145 feet BGS.

- The first and second monitoring wells at Location CD-23 were completed. The wells are screened in the Upper Sand/Gravel Aquifer and Latah Formation from about 76 to 86 feet and 164 to 184 feet BGS, respectively.

- The monitoring well at Location CD-30 was completed. The well is screened in the Upper Sand/Gravel Aquifer from about 98 to 103 feet BGS. The saturated thickness of the Upper Sand/Gravel Aquifer is about 12 feet at this location.

- The second and third monitoring wells at Location CD-43 were completed. The wells are screened in the Lower Sand/Gravel Aquifer from about 278 to 298 feet and 209 to 229 feet BGS, respectively.

o Well Development and initial ground water sampling was completed for the West System. In addition to Phase I monitoring wells CD-40 though CD-43, monitoring wells CD-2(D), CD-3(L), and CD-5 were sampled.

o Well development for the East System Phase I monitoring wells was completed.

o Ground water sampling was completed for East System monitoring well locations CD-20 and CD-21. Ground water sampling for the remainder of the East System monitoring wells is discussed in Section 2.0 of this report.

o EPA/Ecology comments on the Phase I Pilot Well Plan were addressed and a Final Plan issued January 16, 1990.

2.0 ACTIVITIES PROJECTED TO BE COMMENCED/COMPLETED DURING NEXT REPORTING PERIOD

As specified in the Schedule for Submittal of Deliverables, the next reporting period extends through February 1990. Anticipated activities for February include continuation of well construction activities, well development, ground water sampling, and collection of supplemental data for characterization of the Lower Aquifer. Specific activities anticipated to be commenced/completed during the next reporting period include:

o Complete the monitoring wells at Locations CD-31 and CD-32 (by mid February).

o Complete an additional Phase I monitoring well about 50 feet north of Location CD-20. This well will be used as an observation well for the East System - East pilot well, and will be screened within the Basalt Aquifer (by late Febrary).

o Complete a pilot well about 75 feet north of Location CD-20. The well will be completed in the Basalt Aquifer and will constitute the East System - East pilot well described in the Project Pilot Well Plan (by late Febrary).

- Complete an additional Phase I monitoring well about 150 feet east of Location CD-21. The well will be used as an observation well for the East System - North pilot well, and will be screened within the Lower Sand/Gravel Aquifer (by late February).

- Complete a pilot well about 230 feet east of Location CD-21. The well will be completed in the Lower Sand/Gravel Aquifer and will constitute the East System - North pilot well described in the Project Pilot Well Plan (by late February).

- Complete Well Development for the South System Phase I monitoring wells (by late February).

- Complete the initial round of ground water sampling for the East System monitoring wells. Previously constructed monitoring wells CD-1, CD-4(U,L), CD-6(L), CD8(M), and CS-14(L) will be sampled in addition to the Phase I East System monitoring wells (by late February).

- Complete supplemental data collection for the Lower Aquifer. The supplemental data will include collection of additional ground water elevations and ground water samples (for chemical analysis) from existing domestic wells. It is anticipated that reference elevations will be surveyed for about 15 domestic wells, water level elevations will be collected from about 30 domestic wells (and about 10 monitoring wells), and ground water samples will be collected (and analyzed) from about 6 domestic wells. These activities are contingent upon obtaining property access, and EPA/Ecology will be providing a listing of proposed data collection locations once property access has been obtained (by late February).

3.0 ENCOUNTERED/ANTICIPATED PROBLEMS

Preliminary chemical analysis results for ground water samples collected from West System Phase I monitoring wells CD-41, CD-42, and CD-43 indicate (at most) only trace levels of contamination are present in the Lower Aquifer at these locations; all Method 8010 volatile organic compounds were below detection at these locations, except that 1,1,1-Trichloroethane was detected at about 1 part per billion (ppb) in the intermediate well at Location CD-42. Consequently, it is uncertain whether the West System pilot well should be located near Highway 2, as shown in the Project Pilot Well Plan.

Supplemental data will be collected to better define ground water flow and contaminant distribution the Lower Aquifer, as described in Section 2.0 of this report. These supplemental data will assist in locating the West System pilot well, and identifying whether additional suplimental data collection activities (such as a surface geophysics survey and/or additional monitoring wells) are needed to adequately characterize the Lower Aquifer. EPA/Ecology will be kept apprised of supplemental data collection activities.

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This progress report describes the major Remedial Action activities commenced or completed during the reporting period, anticipated to be commenced or completed during the next reporting period, and any problems encountered or anticipated. As such, there are secondary and peripheral activities associated with these major tasks that are not described herein. If clarification is required for any of the activities presented in this progress report, or if additional information is desired for secondary or peripheral activities, please contact me or Dean Fowler (Spokane County).

Very truly yours,

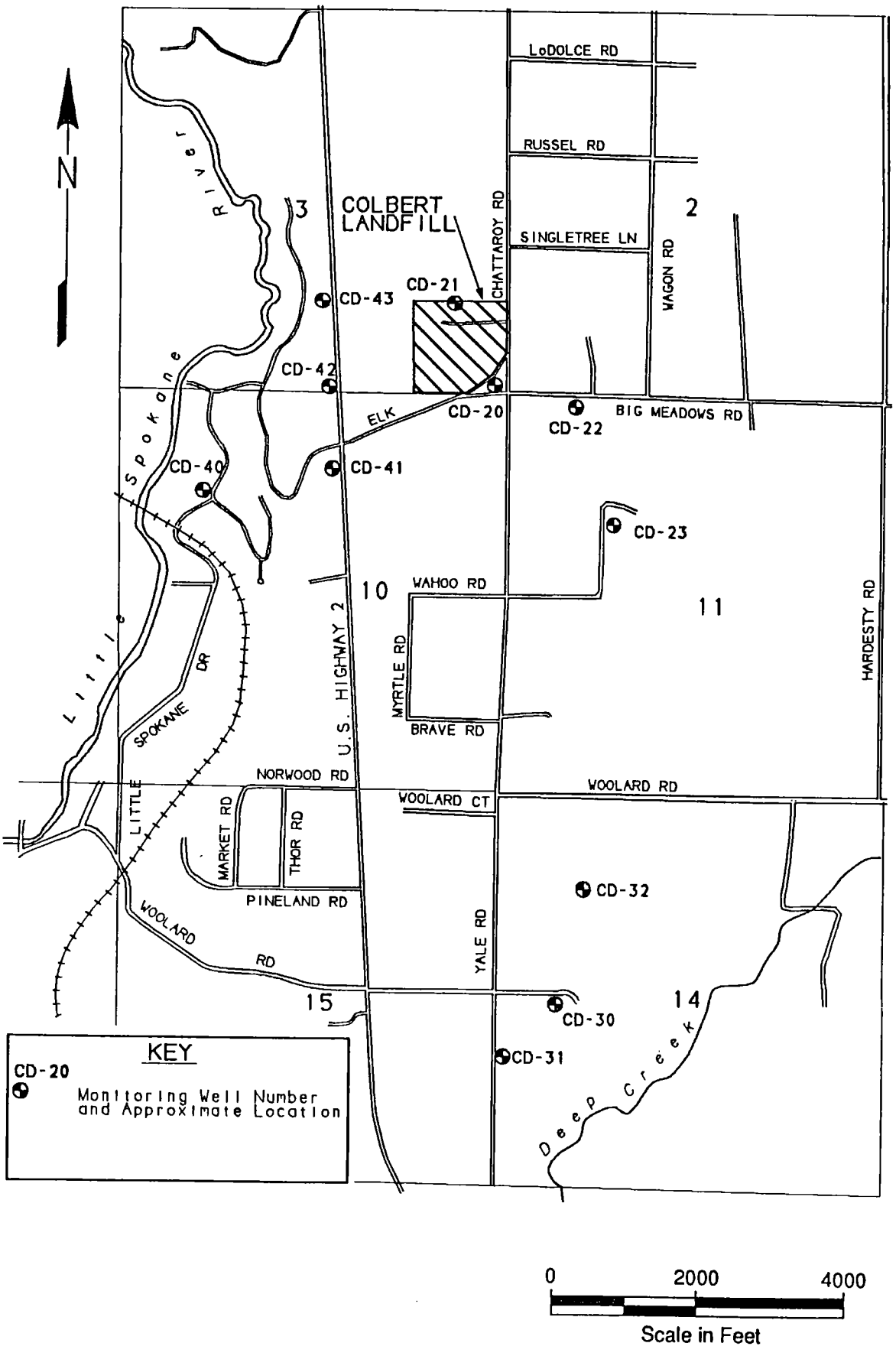
LANDAU ASSOCIATES, INC.

By:

Lawrence D. Beard, P.E.
Project Manager

LDB/yev
No. 124.01.60

cc: Mr. Mike Blum
Washington Dept. of Ecology
Mr. Dean Fowler
Spokane County
Mr. Lyle Diedieker
Ecology and Environment
Attachment



124-01.60 Spokane County/Colbert Landfill/January '90 Progress Report

LANDAU ASSOCIATES, INC.

Site Plan

Figure 1